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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/747,779	12/29/2003	Jakke Makela	KOLS.082PA	6429

7590 12/05/2006

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EXAMINER	
ELMORE, REBA I	

ART UNIT	PAPER NUMBER
2189	

DATE MAILED: 12/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/747,779	MAKELA ET AL.	
	Examiner	Art Unit	
	Reba I. Elmore	2189	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 August 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-18 are presented for examination.

SPECIFICATION

2. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

CLAIM OBJECTIONS

3. The objections to the claims are ***withdrawn*** due to the amendment.

35 USC § 101

4. The rejection to claims 16-17 as being non-statutory subject matter is ***maintained*** and repeated below. Further detail is also given.

5. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 16-17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 16-17 are directed toward computer software, per se, because elements are being claimed without embodiment on a computer readable medium which are actually *executed* on a computer, the instructions are considered to be directed merely towards 'functional descriptive material', which by itself is not statutory subject matter. The language 'for causing a telecommunications device to' is not the same as computer instructions for a processor executing

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the activities of determining, transmitting, comparing and corresponding.

35 USC § 102(b)

7. The rejection of claims 1-17 as being anticipated by Fox is ***maintained*** and updated to included new claim 18 and the amendments to claims 1-17.

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Fox.

10. Fox teaches the invention (claims 1 and 18) including a method for comparing the contents of physical memory components comprised by a first and a second electronic device, the electronic devices being configured to establish a data transmission connection between each other, the method comprising:

means for determining as index numbers, first checksum values relating to a first data transmission event and second checksum values relating to a second data transmission event (e.g., see col. 6, line 39 to col. 7, line 27) wherein the contents of the first and second checksum values are derived from or they describe the contents of the physical memory components as checksums relating to databases stored on memory devices (e.g., see col. 5, lines 31-4);

means for transmitting from the first electronic device to the second electronic device an initialization message having at least the first checksum value and the second checksum value or information for determining the checksums (e.g., see Figures 5-8 and col. 6, line 39 to col. 8, line

36);

comparing the first checksum values and the second checksum values with each other (e.g., see Figures 6-7), as a result of which:

the contents of the memory components are caused to correspond to each other as a response to the device identifiers, the first checksum values or the second checksum values not corresponding to each other (e.g., see Figures 6-7).

As to claim 2, Fox teaches noting that the contents of the memory components correspond to each other as a response to the first checksum values and the second checksum values corresponding to each other (e.g., see Figures 6-7).

As to claim 3, Fox teaches the first and/or second checksum value comprising a device identifier (e.g., see Figure 5 and col. 7, lines 11-27).

As to claim 4, Fox teaches determining the first checksum values by accessing them or information for determining them from the memory of the electronic device (e.g., see Figure 5 and col. 7, lines 11-27).

As to claim 5, Fox teaches determining the first and second checksum value as a response to the second electronic device having received the initialization message (e.g., see Figure 6 and col. 7, lines 28-55).

As to claim 6, Fox teaches transmitting from the second electronic device to the first electronic device an acknowledgement message having at least the first and the second checksum value or information for determining them as a response to the first and the second checksum value having been determined (e.g., see Figures 6-8 and col. 7, line 27 to col. 8, line 37).

As to claim 7, Fox teaches comparing the first checksum values as a response to the

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device identifiers corresponding to each other , as a result of which:

the contents of the memory components are caused to correspond to each other as a response to the first checksum values not corresponding to each other (e.g., see Figures 6-7).

As to claim 8, Fox teaches comparing the second checksum values, as a result of which:

the contents of the memory components are caused to correspond to each other as a response to the second checksum values not corresponding to each other (e.g., see Figures 6-7).

As to claim 9, Fox teaches comparing the second checksum values as a response to the first checksum values corresponding to each other, as a result of which:

the acknowledgement message is retransmitted as a response to the second checksum values not corresponding to each other (e.g., see Figures 6-8 and col. 7, line 27 to col. 8, line 37).

11. Fox teaches the invention (claim 10) as claimed including a system having at least the first and the second electronic device, the electronic devices having physical memory components and means for establishing a data transmission connection between the first electronic device and the second electronic device, wherein,

the first and the second electronic device are configured to determine the first checksum values relating to an earlier data transmission event and second checksum values relating to a second data transmission event (e.g., see Figures 6-7) wherein the contents of the first and second checksum values are derived from or they describe the contents of the physical memory components;

the first electronic device is configured to transmit to the second electronic device an initialization message having at least the second checksum value or information for determining them (e.g., see Figure 6 and col. 7, lines 28-55);

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the first and/or the second electronic device is/are configured to compare the first checksum values and the second checksum values (e.g., see col. 5, lines 31-44); as a result of which:

the first and/or the second electronic device is/are configured to cause the contents of the physical memory components to correspond to each other as a response to the first checksum values or he second checksum values not corresponding to each other (e.g., see Figures 6-8 and col. 7, line 27 to col. 8, line 37).

As to claim 11, Fox teaches the fist and/or the second electronic device is/are configured to note that the contents of the memory components correspond to each other as a response to the first checksum values and the second checksum values corresponding to each other (e.g., see Figures 6-7).

As to claim 12, Fox teaches the first and/or the second checksum value a device identifier (e.g., see Figures 5-8 and col. 6, line 39 to col. 8, line 36).

12. Fox teaches the invention (claim 13) as claimed including an electronic device having a physical memory component and means for establishing a data transmission connection to a second electronic device, wherein the electronic device comprises:

means for determining a first checksum value relating to a first data transmission event and a second checksum value relating to a second data transmission event (e.g., see Figures 5-8 and col. 6, line 39 to col. 8, line 36) wherein the contents of the first and second checksum values are derived from or they describe the contents of the physical memory components;

means for receiving a first and a second checksum value or information for determining them (e.g., see Figures 5-8 and col. 6, line 39 to col. 8, line 36);

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means for comparing the first checksum values and the second checksum values with each other (e.g., see Figures 5-8 and col.5, lines 31-44); and,

means for updating the contents of the physical memory component to correspond to the contents of the physical memory component of the second electronic device as a response to the first checksum values and the second checksum values not corresponding to each other (e.g., see Figures 5-8 and col. 6, line 39 to col. 8, line 36).

As to claim 14, Fox teaches means for noting the correspondence between the contents of the memory component of the electronic device and the contents of the memory component of the second electronic device as a response to the first checksum values and the second checksum values corresponding to each other (e.g., see Figures 5-8 and col. 6, line 39 to col. 8, line 36).

As to claim 15, Fox teaches means for determining the first checksum value by accessing it or information for determining it from the memory of the electronic device (e.g., see Figures 5-8 and col. 6, line 39 to col. 8, line 36).

13. Fox teaches the invention (claim 16) as claimed including a computer readable medium, wherein the computer readable medium comprises computer executable instructions for causing a telecommunications device to:

determine first checksum values relating to a first data transmission event and second checksum values relating to a second data transmission event (e.g., see Figures 5-8 and col. 6, line 39 to col. 8, line 36) wherein the contents of the first and second checksum values are derived from or they describe the contents of physical memory components of a first and a second electronic device;

transmit from the first electronic device to the second electronic device an initialization

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message comprising at least the first checksum value and the second checksum value or information for determining them as initializing the checksum determinations (e.g., see 7, lines 28-55);

compare the first checksum values and the second checksum values with each other as a result of which (e.g., see col. 5, lines 31-44); and,

the contents of the physical memory components are caused to correspond to each other as a response to the first checksum values or the second checksum values not corresponding to each other (e.g., see Figures 5-8 and col. 6, line 39 to col. 8, line 36).

As to claim 17, Fox teaches the correspondence between the contents of the memory component of the first electronic device and the contents of the memory component of the second electronic device as a response to the first checksum values and the second checksum values corresponding to each other (e.g., see Figures 5-8 and col. 6, line 39 to col. 8, line 36).

RESPONSE TO APPLICANT'S REMARKS

14. Applicant's arguments filed September 8, 2006 have been fully considered but they are not persuasive.

15. As to the claims now including the memory components being physical memory in contrast to either logical or virtual memory, the Fox reference does not specify using either virtual or logical memory. In fact, the Fox reference is directed to databases in a digital cross-connect system using checksums to improve distributed database integrity. The databases are stored using physical memory devices. Although the reference does not use the term 'physical' to describe the memory, the terms 'virtual' and 'logical' are not used either. There is an absence of address structure which would be necessary to support virtual or logical memory.

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Additionally, the reference teaches the databases are stored within internal memory or within an external memory device which relates to physical memory and not virtual or logical memory. Also, virtual and logical memory must be based on physical memory devices.

16. As to the Fox reference not teaching comparing the first checksum values and the second checksum values with each other, this element is taught. Comparing the first and second checksum values is stated in the abstract and the reference specifically teaches synchronizing the databases to make them match if the checksums fail to match.

OFFICE ACTION FINALITY

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

CONCLUSION

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reba I. Elmore, whose telephone number is (571) 272-4192. The

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examiner can normally be reached on Monday and Wednesday from 7:30am to 6:00pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the art unit supervisor for AU 2189, Reginald G. Bragdon, can be reached for general questions concerning this application at (571) 272-4204. Additionally, the official fax phone number for the art unit is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Tech Center central telephone number is (571) 272-2100.

Reba I. Elmore
Primary Patent Examiner
Art Unit 2189

Thursday, November 30, 2006

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